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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,710	08/04/2003	Isidor Hazan	FA1071USNA	9059
23906	7590	07/15/2005	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			RONESI, VICKEY M	
		ART UNIT		PAPER NUMBER
		1714		
DATE MAILED: 07/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	h k
	10/623,710	HAZAN ET AL.	
	Examiner Vickey Ronesi	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-13 is/are pending in the application.
  - 4a) Of the above claim(s) 10-13 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-13 are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/14/04, 3/1/04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, drawn to a composition, classified in class 524, subclass 589.
  - II. Claims 10-13, drawn to a cured layer on a substrate, classified in class 428, subclass 446.
2. The inventions are distinct, each from the other because:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an intermediate layer in a laminate and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. It is noted that while claim 10 is drawn to a method, claim 10 has been combined with the article claims (claims 11-13) given that no significant method steps are presented.

3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. During a telephone conversation with Steven Benjamin on 6/22/2005 a provisional election was made WITH traverse to prosecute the invention of Invention I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### *Claim Objections*

7. Claim 1 is objected to because of a minor informality. In part (d), the term "by weight" should be inserted after "15-90%" to be consistent with the other parts (a)-(c).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, in part (b), the term “low molecular weight” is rendered indefinite since “low” is a relative term which renders the claim indefinite since the term “low” is not defined by the claim.

With respect to claims 1 and 7, it is not clear if the parenthetical expression, “(urea, urethane and/or hydroxy)”, with respect to the functional groups is a limitation. If the expression is only exemplary language, the specific functional groups are not given patentable weight. See MPEP 2173.05(d). If at least one of the recited functional groups is mandatorily present, revision of the claim language is necessary, e.g., “at least one additional functional group selected from the group consisting of urea, urethane, and hydroxy”.

With respect to claim 4, given that claim 1 recites that the silane functional oligomer contains a functional group such urea or urethane, it is unclear if the urethane and urea recited in claim 4 is in fact further limiting the functional group of the silane functional oligomer or if the silane functional oligomer (in addition to a urea or urethane functional group) contains a urethane or urea linkage in the backbone.

With respect to claims 2, 3, 5, 6, 8, and 9, they are rejected for being dependent on a rejected claim.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, 4, 6, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hazan et al (US 5,250,605, cited on IDS filed 3/1/2004).

Hazan et al discloses a coating composition having 50-75 wt % binder solids (col. 3, lines 45-46) comprising a liquid organic carrier (col. 2, lines 28-29); conductive pigment such as carbon black (col. 15, lines 44-55); and a binder, wherein the binder contains 20-90 wt % silane-containing polymer with hydroxy and urethane functional groups (col. 5, lines 26-51) having a  $M_w$  of about 1,000-30,000 (col. 3, lines 57-58) 20-90 wt % polymeric polyol (col. 5, lines 61-68), 5-50 wt % crosslinking agent such as melamine formaldehyde resin (col. 13, lines 30-58), 10-90 wt % dispersed polymer (col. 10, lines 13-48), and 1-15 wt % silsesquioxane (col. 13, line 60 to col. 14, line 45). Any unreacted silane monomer would inherently behave as a silane coupling agent, there being no significant distinction between a silane monomer and a silane coupling agent in terms of chemical structure.

In light of the above, it is clear that Hazan et al anticipates the presently cited claims.

10. Claims 1, 4-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Uhlianuk et al (WO 00/55229, cited on IDS filed 3/1/2004).

Uhlianuk et al discloses a high solids (page 2, lines 35-38) clear coating composition comprising an organic solvent (page 9, lines 11-19) and solids component containing 10-40 wt % melamine component such as Cymel 1158 and 1168 (page 5, lines 8-37; page 17, line 1) which are melamine-formaldehyde resins as exemplified on page 12, lines 19 and 21 of the present specification, 5-45 wt % of silane polymer having a  $M_w$  of 100-30,000 (page 6, lines 33-37; page 8, line 28 to page 9, line 3) such as a silane-functional polyurethane polymer derived from a propylene carbonate (i.e., cyclic carbonate) and a polyisocyanate (page 16, lines 1-23); and 0.1-40 wt % non-aqueous dispersion-type resin with OH-functional groups (page 10, line 31 to page 11, line 38). Any unreacted silane monomer would inherently behave as a silane coupling agent, there being no significant distinction between a silane monomer and a silane coupling agent in terms of chemical structure.

In light of the above, it is clear that Uhlianuk et al anticipates the presently cited claims.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hazan et al (US 5,250,605) in view of Gouda et al (US 5,374,682).

The discussion with respect to Hazan et al in paragraph 9 above is incorporated here by reference.

While Hazan et al discloses the use of pigments such as carbon black *and the like* (col. 15, lines 44-55), it fails to expressly disclose the use of a mixture of carbon black and graphite.

Gouda et al discloses thermosetting composition utilized in automotive coatings and teaches that conventional pigments include carbon blacks and graphite (col. 14, lines 26-32).

Given that Hazan et al is open to the use of other pigments and given that mixing of pigment is well known in the art, it would have been obvious to one of ordinary skill in the art to utilize another conventional pigment such as graphite with the carbon black of Hazan et al and thereby arrive at the presently cited claim.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hazan et al (US 5,250,605) in view of Ito et al (US 5,061,749).

The discussion with respect to Hazan et al in paragraph 9 above is incorporated here by reference.

While Hazan et al discloses the use of a water scavenger such as methyl orthoformate, triethyl orthoformate, *and the like* (col. 15, lines 19-21), it fails to expressly disclose the use of an orthoacetate ester water scavenger like presently claimed.

Ito et al discloses a one-pack procurable composition and teaches that conventional moisture adsorbers include trialkyl orthoformates and trialkyl orthoacetates (col. 4, lines 10-16).

Given that Hazan et al is open to the use of any suitable water scavenger, it would have been obvious to one of ordinary skill in the art to utilize another conventional water scavenger such as the orthoacetates taught by Ito et al and thereby arrive at the presently cited claim.

Moreover, given that Ito et al teaches the functional equivalency of orthoformates and

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orthoacetates as water scavengers, it would have been obvious to substitute Ito et al's orthoacetates with the orthoformates taught by Hazan et al and thereby also arrive at the presently cited claims. Case law holds that the mere substitution of an equivalent (something equal in value or meaning, as taught by analogous prior art) is not an act of invention; where equivalency is known to the prior art, the substitution of one equivalent for another is not patentable. See *In re Ruff* 118 USPQ 343 (CCPA 1958).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1, 2, and 4-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 5-11 of copending Application No. 10/803,250. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US Appl. '250 claims a composition comprising an organic liquid carrier; conductive pigment; orthoacetate ester water scavenger; and a binder comprising 10-90 wt % silane functional compound like presently claimed, 0-70 wt % low molecular weight polyol compound,

0-15 wt % silane coupling agent, 10-90 wt % melamine-formaldehyde crosslinking agent, and 0-10 wt % dispersed particles like presently claimed. All of the ranges of amounts are either identical to or substantially overlap the presently recited ranges.

The difference between the two applications is a difference in the amount of silane functional oligomer, but given that the US Appl. '250 claims an amount that substantially overlaps the amount presently claimed, it would have been obvious to one of ordinary skill in the art to choose the amount of silane functional oligomer, including those presently claimed, and thereby arrive at the presently claimed invention from the copending one.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 1, 2, and 4-9 are directed to an invention not patentably distinct from claims 1, 2, and 5-11 of commonly assigned Application No. 10/803,250. Specifically, see the discussion set forth in paragraph 13 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned Application No. 10/803,250, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

***Contact Information***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/11/2005  
vr  
*[Signature]*

*Callie Shosho*  
CALLIE E. SHOSHO  
PRIMARY EXAMINER